

Section B:1 Waste Management

PROJECT MANAGERS

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SUMMARY

Waste Management consists of the Solid Waste Storage and Disposal, Project Baseline Summary (PBS) WM03, Work Breakdown Structure (WBS) 1.2.1; Solid Waste Treatment, PBS WM04, WBS 1.2.2; Liquid Effluents - 200 Area, PBS WM05, WBS 1.2.3.1; and the Waste Encapsulation and Storage Facility, PBS TP02, WBS 1.4.2.

PBS WM05 is divided between WBS 1.2.3.1, Liquid Effluents (200 LEF) and WBS 1.2.3.2, 310 TEDF/340 Facility (300 LEF). The 310 TEDF/340 Facility work scope is now included in the River Corridor Project, whereas the Liquid Effluents (200 LEF) work scope has remained in Waste Management. For the purpose of performance analysis, PBS WM05 is reported in its entirety in the Waste Management Project, which has the majority of the work scope and funding.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of May 31, 2000. Other information is updated as noted.

Fiscal-year-to-date milestone performance (EA, DOE-HQ and RL) shows that one milestone (100 percent) was completed on or ahead of schedule. Overall Project performance continues to be excellent. Cost and schedule goals are on track to be met.

ACCOMPLISHMENTS

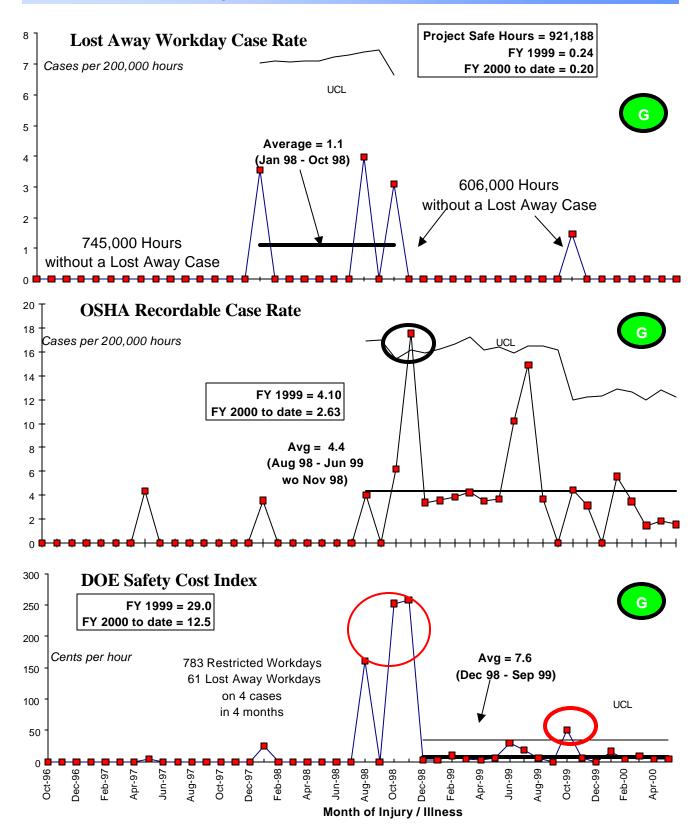
- The first Transuranic packaging transporter (TRUPACT II) shipping container has been loaded and leak tested. Thirty-three drums have been loaded for shipment in three TRUPACT II shipping containers. The TRUPACT IIs will remain loaded and "ready for shipment" pending resolution of the New Mexico Environment Department issues.
- Shipped 708 containers totaling 990 cubic meters of mixed low-level waste to Allied Technology Group, Inc. (ATG), which represents 85% of the FY 2000 target. This waste volume represents an effective Central Waste Complex (CWC) storage volume reduction of 1,670 cubic meters. ATG has treated 186 containers totaling 569 cubic meters of waste, which represents 49% of the FY 2000 treatment target. Hanford has accepted back for disposal, 114 containers totaling 300 cubic meters, which represents 43.2% of the FY 2000 disposal target. (All data projected to June 16, 2000.)
- Completed nondestructive examination on 590 drums, radiography on 27 boxes, nondestructive assays of 563 drums, processing of 29 drums through the Low Level Waste repackaging/compaction glovebox, visual examinations of 25 TRU drums and repackaged 14 Waste Isolation Pilot Plant TRU drums in the TRU glovebox at the Waste Receiving and Processing (WRAP) facility through June 8, 2000. (Performance during current period on plan.)

PHMC Environmental Management Performance Report – July 2000 Section B: 1 – Waste Management

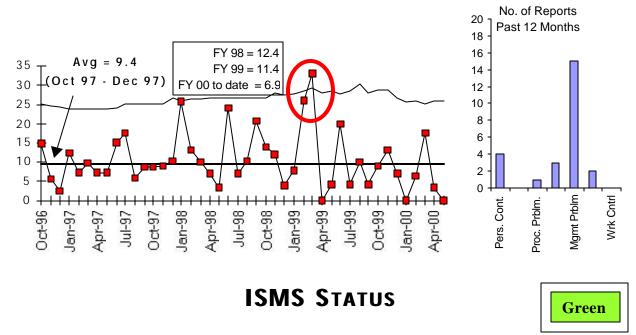
- Process feed to the 242A Evaporator was completed on May 2, 2000 and flushing of the evaporator completed on May 5. The campaign processed 1.3 million gallons of high-level radioactive waste with an all-time high operational efficiency of 99.3%. Processed 11.9 million gallons of wastewater through the 200 Effluent Treatment Facility (through June 16, 2000) supporting River Protection Project (RPP), Environmental Restoration Contract (ERC) 200-UP-1 Groundwater, N-Basin Water, Mixed Waste Trench Leachate, and Environmental Restoration Disposal Facility (ERDF) Leachate.
- The Hanford Mixed Waste Management Program Implementation Plan for the Ecology final Determination on Land Disposal Restriction (LDR) was approved on June 12, 2000. This document contains a number of requirements for format and content changes to the annual LDR report as well as business conduct changes (e.g., storage compliance assessment program). A version of this "Hanford Site Mixed Waste Management Program Implementation Plan," a progress report that shows progress in implementing the plan, and an updated LDR report for 2000, will be issued by July 31, 2000 to the regulators to satisfy the requirements of TPA milestone M-26-01. Work is beginning on the progress report for the July 31, 2000 deliverable.

Safety

The project's safety rates are stable. The WMP Safety Council has taken actions to work with the various project safety councils and management to review past events and identify corrective actions.



CONDUCT OF OPERATIONS / ISMS STATUS CONDUCT OF OPERATIONS Events per 200,000 hours



Completed Activities:

- The DOE ISMS Phase I verification team completed their review, including interviewing of individual employees against a set of CRADS (Criteria and Review Approach Document). All CRAD objectives were met. Several Noteworthy Practices were found, as well as Opportunities for Improvement.
- The final Session Four Training, "ISMS Verification and Your Role" was completed on June 8, 2000. This training will help the activity level workforce prepare for Phase II verification. Authorization Agreements are approved.
- All 100 / 200 level administrative procedures that impact the WM / AS ISMS System Description have been revised to more closely reflect the FH MP-001.
- CRAD Books, which include crosswalks between the System Description and implementing mechanisms, were completed.
- SMART books for Phase II were developed for the DOE team members and those likely to be interviewed.

Planned Actions:

- Phase II verification is currently scheduled to begin June 12, 2000 and will continue through approximately June 21, 2000.
 - Generate and implement out-year plan to sustain and maintain ISMS effort.

Breakthroughs / Opportunities for Improvement

The Waste Management Project is leading the "Waste and Materials Disposition" Team in the DOE RL 200 Area Options Study effort. This identification of potential flexibility in the activities will provide a basis for opportunities in refining baselines in the FY 2002-2016 timeframe.

UPCOMING ACTIVITIES

WIPP Certification and Waste Shipments — Complete Waste Isolation Pilot Project (WIPP) Certification of Hanford's Transuranic (TRU) Project and initiate TRU shipments to WIPP.

PMP for TRU & TRUM Waste — Issue Project Management Plan (PMP) for TRU & TRUM (Transuranic Mixed) Waste in June 2000 to meet M-91 milestone.

MLLW Treatment — Treat 1,160 cubic meters (includes 100 cubic meters stretch) of Mixed Low-Level Waste (MLLW) at Allied Technology Group (ATG) by August 2000; dispose of the Land Disposal Restriction compliant waste by September 2000.

Suspect TRU Waste Retrieval — Retrieve 425 drums of suspect TRU waste from the Low-Level Burial Grounds by September 2000.

Accelerate Readiness to Receive Spent Nuclear Fuel K Basin Sludge — Clear three sections of the T Plant Canyon deck in FY 2000 and complete entire deck clearing by FY 2001. Complete Project Execution Plan and Conceptual Design Documents for removal of Shippingport Fuel from T Plant in FY 2000.

Land Disposal Restriction Report — Issue the year 2000 LDR Report by July 31, 2000.

COST PERFORMANCE (\$M):

	BCWP	ACWP	VARIANCE
Waste Management	\$67.3	\$67.9	- \$0.6

The \$0.6M (1 percent) unfavorable cost variance is within the established threshold. Further information at the PBS level can be found in the following Cost Variance Analysis details.

SCHEDULE PERFORMANCE (\$M):

	BCWP	BCWS	VARIANCE
Waste Management	\$67.3	\$69.4	- \$2.2

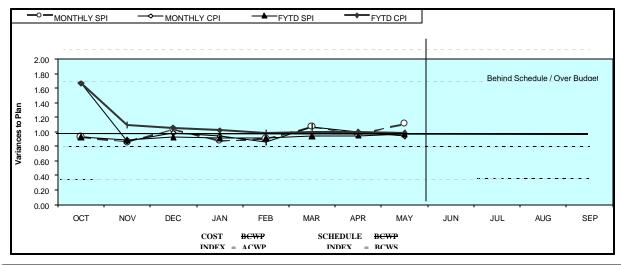
The \$2.2 million (3 percent) unfavorable schedule variance is within established threshold. Further information at the PBS level can be found in the following Schedule Variance Analysis details.

FY 2000 COST/SCHEDULE PERFORMANCE — ALL FUND TYPES CUMULATIVE TO DATE STATUS — (\$000)

						F	YTE)									
	By PBS	E	BCWS	BCWP	-	ACWP		sv	%	cv	%	="	PEM	FYS	SF	EAC	c
PBS WM03 WBS 1.2.1	Solid Waste Storage & Disposal	\$	22,675	\$ 22,158	\$	22,276	\$	(516)	-2%	\$ (118)	-1%	\$	34,323	\$	34,269	\$	34,269
PBS WM04 WBS 1.2.2	Solid Waste Treatment	\$	19,746	\$ 19,606	\$	20,804	\$	(140)	-1%	\$ (1,198)	-6%	\$	30,766	\$	35,074	\$	35,074
PBS WM05* WBS 1.2.3	Liquid Effluents - 200/300 Area	\$	18,684	\$ 17,565	\$	16,677	\$	(1,119)	-6%	\$ 888	5%	\$	29,326	\$	26,649	\$	26,649
PBS TP02 WBS 1.4.2	WESF	\$	8,326	\$ 7,929	\$	8,138	\$	(397)	-5%	\$ (208)	-3%	\$	12,708	\$	12,197	\$	12,197
	Total	\$	69,431	\$ 67,259	\$	67,895	\$	(2,172)	-3%	\$ (636)	-1%	\$	107,123	\$	108,189	\$	108,189

- PBS WM05 includes the 300 Area Liquid Effluent, which is part of the River Corridor Project.
- RL-Directed costs (steam and laundry) are included in the PEM BCWS.

COST/SCHEDULE PERFORMANCE INDICES (MONTHLY AND FYTD)



FV 2000	0	СТ	N	OV	Г	EC		ΙΔΝ		FFR		MAR		ΔPR	-	MAV		IIIN		ш		ΔIIG		SEP
MONTHI Y SPI		0.93		0.86		1.03		0.88		0.90		1.07		0.96		1.11								
MONTHLY CPI		1.66		0.87		0.98		0.94		0.86		1.07		0.99		0.94								
FYTD SPI		0.93		0.89		0.93		0.92		0.91		0.95		0.95		0.97								
FYTD CPI		1.66		1.09		1.05		1.02		0.98		1.00		1.00		0.99								
MONTHLY BCWS	S	6.641	S	9.616	S	7.269	S	8.331	S	8.862	S	10.686	s	8.906	S	9.121	S	8.108	S	7.965	S	10.627	S	10.992
MONTHI Y RCWP	S	6.163	S	8.277	S	7.499	S	7.291	S	7.973	S	11.406	\$	8.514	S	10.136								
MONTHLY ACWP	s	3.703	S	9.520	S	7.619	s	7.789	S	9.270	S	10.685	S	8.580	S	10.729								
FYTD RCWS	S	6.641	S	16.257	S	23.526	S	31.857	S	40.719	S	51.404	S	60.310	S	69.431	S	77.539	S	85.504	S	96.132	S	107.123
FYTD BCWP	s	6.163	s	14.440	s	21.939	s	29.230	s	37.203	s	48.609	s	57.123	S	67.259								
FYTD ACWP	S	3.703	S	13.223	\$	20.842	S	28.631	S	37.901	S	48.586	\$	57.166	S	67.895								

COST VARIANCE ANALYSIS: (- \$0.6M)

WBS/PBS <u>Title</u>

1.2.1/WM03 Solid Waste Storage & Disposal

Description/Cause: The unfavorable cost variance of \$0.1M (1 percent) is within the established

threshold.

Impact: No impact.

Corrective Action: No action required.

1.2.2/WM04 Solid Waste Treatment

Description/Cause: The unfavorable cost variance of \$1.2M (6 percent) is due to Canyon Deck Clean Off workscope being performed under an Advanced Work Authorization (AWA) for T Plant support to accelerated SNF sludge removal. In addition, there are retooling and TRU project recertification costs caused by the new WIPP permit changes. Installation of the 2706-T greenhouse to support production and additional minimum safe maintenance activities also contributed to the variance.

Impact: No impact.

Corrective Action: A BCR for the T Plant was approved on 6/1 and will be implemented in the June baseline. A BCR for the TRU Project additional workscope has been submitted.

1.2.3.1/WM05 Liquid Effluents

Description/Cause: The favorable cost variance of \$0.9M (6 percent) is within the established

threshold.

Impact: No impact.

Corrective Action: No corrective action required.

1.4.2/TP02 WESF

Description/Cause: The unfavorable cost variance of \$0.2M (3 percent) is within the established

threshold.

Impact: No impact.

Corrective Action: No corrective action required.

SCHEDULE VARIANCE ANALYSIS: (- \$2.2M)

WBS/PBS <u>Title</u>

1.2.1/ WM03 Solid Waste Storage & Disposal

Description /Cause: The unfavorable schedule variance of \$0.5M (2 percent) is within the established

threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

PHMC Environmental Management Performance Report – July 2000 Section B: 1 – Waste Management

1.2.2/ WM04 Solid Waste Treatment

Description / Cause: The unfavorable schedule variance of \$0.1M (1 percent) is within the established

threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

1.2.3.1/ WM05 Liquid Effluents

Description / Cause: The unfavorable schedule variance of \$1.1M (6 percent) is within the established

threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

1.4.2/ TP02 WESF

Description /Cause: The unfavorable schedule variance of \$0.4M (5 percent) is within the established

threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

ISSUES

Technical Issues

Nothing to report at this time.

DOE/Regulator/External Issues

The Waste Management Programmatic Environmental Impact Statement (PEIS) was issued on February 25, 2000. These Records of Decision (ROD) for LLW and MLLW will affect Hanford's disposal role for the Complex and the ROD outcomes may have a significant impact on disposal volumes and rates at Hanford. DOE-HQ and WDOE negotiations continue; impacts depend upon results of these negotiations.

Certification of Hanford's TRU Project is necessary to initiate waste shipment to WIPP.

Continue working with the Carlsbad Area Office, the Environmental Protection Agency (EPA) and the New Mexico Environment Department (NMED) to achieve WIPP certification of Hanford's TRU Project and initiate waste shipment to WIPP.

Ecology issued a Final Determination (FD) regarding the "recent" dispute over the scope of the annual Land. The Hanford Mixed Waste Management Program Implementation Plan for the Ecology Final Determination on LDR was approved on June 13, 2000. This document contains a number of requirements for format and content changes to the annual LDR report as well as business conduct changes (e.g., storage compliance assessment program). A version of this "Hanford Site

Mixed Waste Management Program Implementation Plan," a progress report that shows progress in implementing the plan, and an updated LDR report for 2000, will be issued by July 31, 2000 to the regulators to satisfy the requirements of TPA milestone M-26-01.

Baseline Change Requests Currently in Process (\$000)

PROJECT CHANGE	DATE	BCD TITLE		00 COST MPACT	SCH	TECH	DATE	CCB	RL	CURRENT STATUS
WM-2000-003	2/8/00	T-Plant Canyon Deck Clean off and PWR Fuel Removal	\$	3,085			4/13/200	04/13/00	06/01/00	To be implemented in June Baseline
WM-2000-004	2/8/00	WMP Stretch Goals	\$	1,250			05/31/00	05/31/00		At DOE-RL
WM-2000-006	3/21/00	TRU Project Rebaselining	\$	-			06/08/00	06/08/00		At DOE-RL
WM-2000-008	4/13/00	LDR	\$	415			TBD			Draft
WM-2000-009	4/13/00	616 Transition	\$	87			N/A	N/A	N/A	Approved by Project Director 6/2/00
WM-2000-011	4/27/00	CSERS/Weed & Pest Allocation	\$	963			06/01/00	06/01/00	N/A	To be implemented in June Baseline
		ADVANCE V	VOF	RK AUTH	IORIZA	TIONS				
AWA	6/1/00	TRU Retrieval/TRU PMP	\$	750					06/01/00	Acceleration of scope
AWA	5/8/00	LDR	\$	165					5/8/00	Acceleration of scope

MILESTONE ACHIEVEMENT

	F	SCAL YEA	R-TO-DATE	<u> </u>	REMAI			
MILESTONE TYPE	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	TOTAL FY 2000
Enforceable Agreement	1	0	0	0	0	1	0	2
DOE-HO	0	0	0	0	0	0	0	0
RL	0	0	0	0	0	9	0	9
Total Project	1	0	0	0	0	10	0	11

Tri-Party Agreement / EA Milestones

Number	Milestone Title	Status
M-91-03 (WMH-00- 001)	Issue TRU/TRUM Waste PMP	due 06/30/00 — On schedule (stretch)
M-91-04 (A2J-00-001)	Complete Construction of CH TRU/TRUM Retrieval Facility	due 09/29/00 — DOE-RL issued a letter to Ecology on February 29, 2000 documenting closure of the TPA milestone as retrieval has been initiated and is planned to continue, even without construction of Project W-113 facilities.

DNFSB Commitments

Nothing to report.	

MILESTONE EXCEPTION REPORT

Baseline Forecast

<u>Number/WBS Level Milestone Title Date</u>

Overdue - 0

FORECAST LATE - 0

FY 1999 OVERDUE - 1

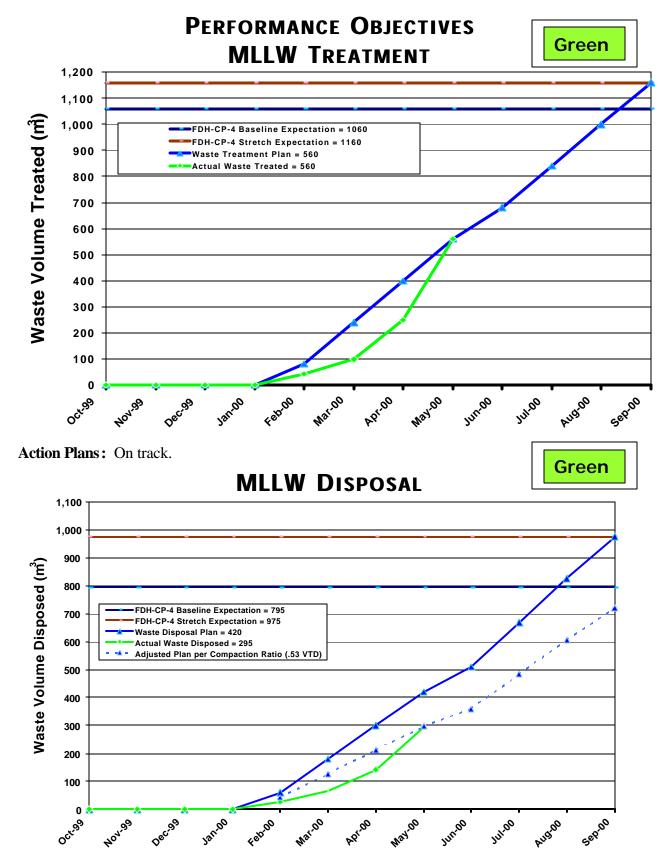
TRP-98-709 RL Complete Hot Cell Deactivation 03/31/99 09/30/00

1.4.2 WESF Facility (A-E)

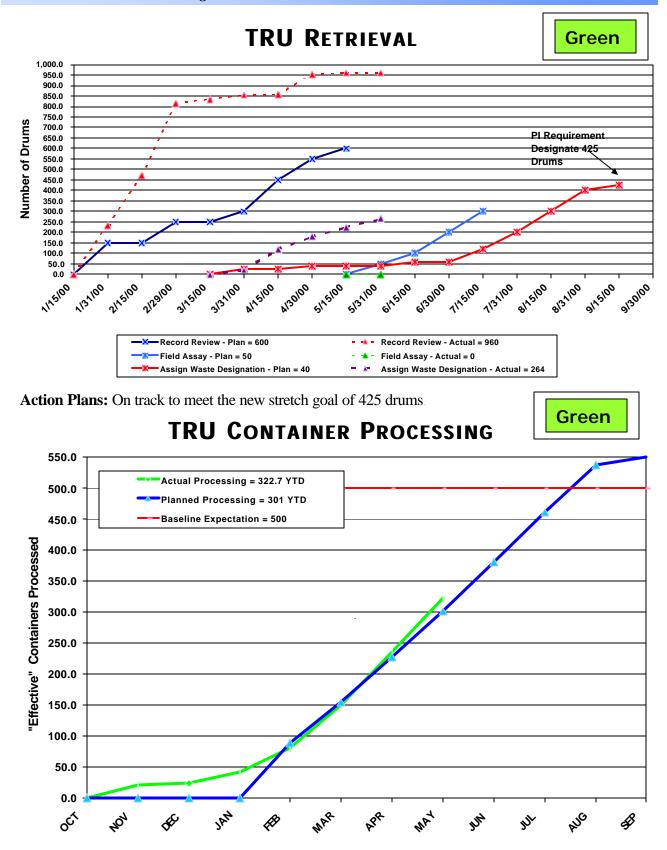
Cause: This milestone is not complete due to not being supported at the current funding level.

Impact: No overall impact is expected.

Corrective Action: Return-on-Investment (ROI) funding has been identified for this work scope and a new forecasted completion date of September 30, 2000 established.



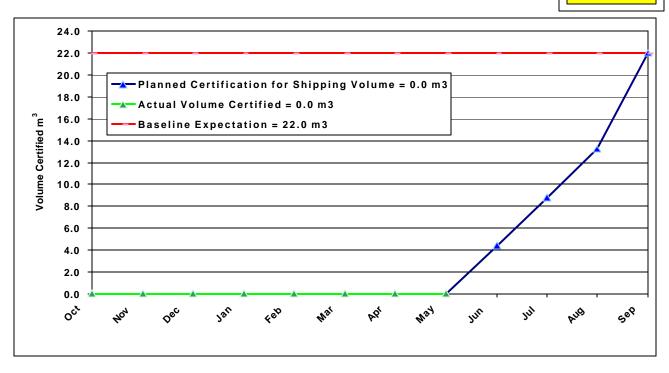
Action Plans: Ramping-up to meet stretch expectation.



Action Plans: On track.

TRU CERTIFICATION FOR SHIPPING

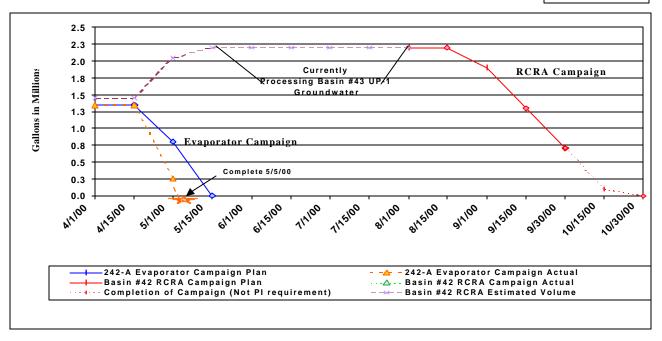
Yellow



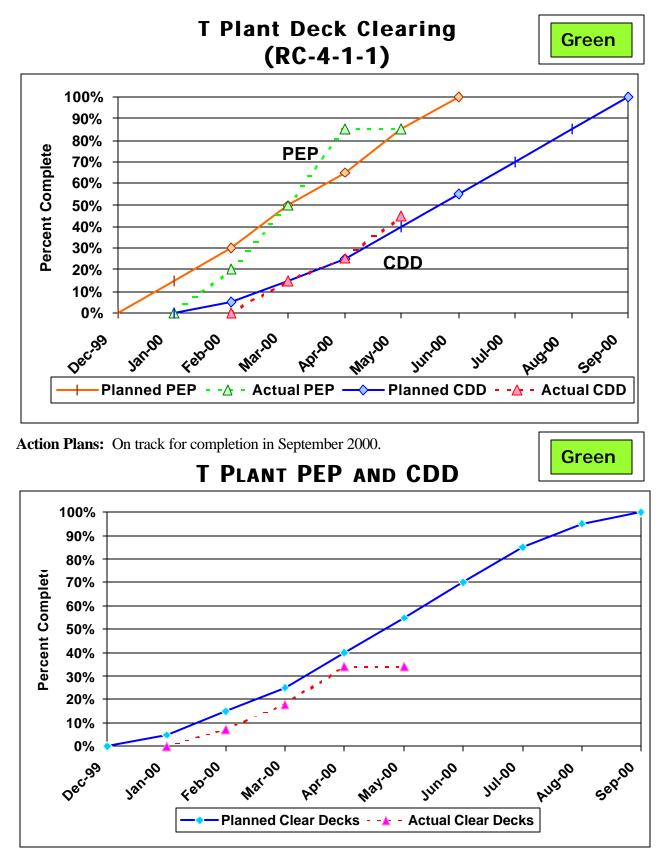
Action Plans: Initial shipment delayed beyond the planned June 19, 2000 date.

LIQUID WASTE PROCESSING

Green



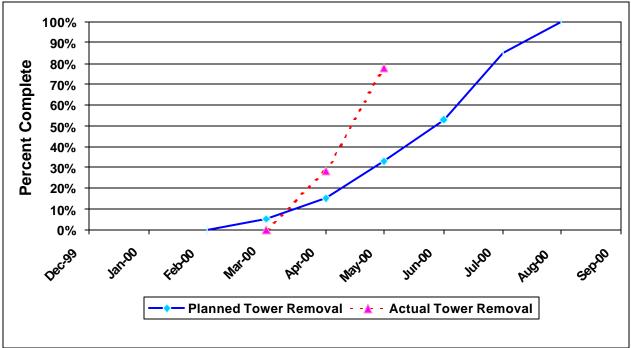
Action Plans: On track. The 242A Evaporator campaign was completed on May 2, 2000. The RCRA campaign scheduled to begin in mid-August 2000. A change agreement was completed and the PI revised in May 2000.



Action Plans: On track for Project Execution Plan (PEP) completion in June 2000 and completion of the Conceptual Design Document (CDD) in September 2000.







Action Plans: On track for removal of two PUREX Towers from the T Plant canyon by September 2000. PUREX Tower T-C3-1 was successfully shipped to LLBG, unloaded and buried on June 1, 2000.

KEY INTEGRATION ACTIVITIES

- Preparing T Plant to receive Spent Nuclear Fuel K Basin sludge.
- Issuance of Records of Decision for LLW and MLLW is expected to affect Hanford's role in disposing of waste from other sites. Working with DOE-RL, DOE-HQ, WDOE and other Sites to develop and define Hanford's role as one of the identified LLW/MLLW disposal sites for the Complex.
- Support continued UP-1 Groundwater treatment.
- Support River Corridor Project in cleanup and removal of waste from 324 and 327 buildings.
- Support DOE-RL declaration of Readiness-to-Proceed in support of the ORP Privatization contract.
- Continue working with PNNL, EM 50 and Mixed Waste Focus Area (MWFA) to obtain funding in support of mixed waste processing (M-91 Facility Project).
- Continue to work with DOE- RL, -Oakland, and -Ohio to support resolution of TRU small quantity site disposition issues.